



#17 appellant appeal  
brief  
Kauran  
6/19/03

Appl. No. 09/873,564

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Brief

Brief following Appeal of 15 April 2003

**IN THE UNITED STATES PATENT AND TRADEMARK  
OFFICE BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Appl. No. : 09/873,564  
Applicant(s) : van DOMMELEN, Mark J., et al.  
Filed : 4 June 2001  
Title : HIGH-PRESSURE DISCHARGE LAMP  
TC/A.U. : 2841  
Examiner : LEVI, Dameon E.  
Atty. Docket : PHBE 000011

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On: June 11, 2003

By: John C Fox

**APPELLANTS APPEAL BRIEF**

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Sir:

**BRIEF OF APPELLANT**

This Brief of Appellant follows a Notice of Appeal,  
dated 15 April, 2003, appealing the final rejection of claims 1  
and 3 of the application, the final rejection dated 16 January,  
2003. All requisite fees set forth in 37 CFR 1.17(c) for this  
Brief are hereby authorized to be charged to Deposit Account  
No. 501850.

REAL PARTY IN INTEREST

The real party in interest in this appeal is the assignee of all rights in and to the subject application, Koninklijke Philips Electronics, N.V. of The Netherlands.

RELATED APPEALS AND INTERFERENCES

To the best of the knowledge of the undersigned, no other appeals or interferences are known to Appellants, Appellants' legal representatives, or assignee which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

STATUS OF CLAIMS

Of the original claims 1-3, claims 1 and 3 were amended and claim 2 was cancelled. Claims 1 and 3 stand finally rejected as set forth in the final Office Action dated 16 January, 2003, and are the subject of this appeal.

STATUS OF AMENDMENTS

No amendment to the specification and/or claims was offered subsequent to the final Office action. All amendments have been entered.

SUMMARY OF THE INVENTION

The invention relates to a high-pressure discharge lamp (L) comprising a discharge vessel (3) which is enveloped with clearance (10) by an outer bulb (1) provided with a lamp cap (2), which outer bulb (1) is translucent. Page 1, lines 1-3.

A lamp of this type is commonly known and finds wide application, for example, in public lighting. The outer bulb of the known lamp is shaped, for example, like an ovoid or paraboloid of revolution. The outer bulb may be provided at an end portion with a dimple or a dome to support the discharge vessel. Page 1, lines 6-10.

A drawback of the known lamp is that it is comparatively voluminous, which adversely affects the light-focusing possibilities. Page 1, lines 11-13.

In accordance with the invention, a lamp (L) of the type mentioned is characterized by the outer bulb (1) being substantially tubular in shape. Page 1, lines 14-19.

It has been found that a substantially tubular outer bulb (1) not only leads to a smaller volume of the lamp (L) but also to a higher light output of the lamp (L) in a luminaire that is suitable for the known lamp, without the beam

distribution being adversely affected. As a result, the lamp in accordance with the invention can very suitably replace the known lamp. Page 1, lines 20-24.

The outer bulb (1) is provided with a light-scattering layer (30). This has the advantage that the strength of the outer bulb (1) is not adversely affected, as is the case when a surface of the outer bulb itself is rendered diffusely scattering, for example, by means of sandblasting. Page 1, lines 25-28.

It is particularly suitable if the light-scattering layer (30) is in the form of an electrostatic coating. Such an electrostatic coating is comparatively simple to produce in industrial-scale batch production processes. Page 1, line 28 through page 2, line 2.

#### ISSUES

The sole issue on appeal is whether claims 1 and 3 are unpatentable over Verschueren (U. S. Patent Number 5,612,585) in view of Thornton (U. S. patent 4,315,193).

#### GROUPING OF CLAIMS

Claims 1 and 3 each stand alone.

ARGUMENT

Are claims 1 and 3 unpatentable over Verschueren (U. S. Patent Number 5,612,585) in view of Thornton (U. S. patent 4,315,193)?

Claims 1 and 3 are rejected under 35 USC 103(a) as being unpatentable over Verschueren in view of Thornton.

Claim 1 calls for a high-pressure discharge lamp having an outer bulb which is substantially tubular in shape, and which has a light-scattering layer.

Verschueren discloses a high-pressure discharge lamp with a heat shield for influencing the heat balance of the discharge tube. See col. 1, lines 14, 15. The invention lies in the construction of the heat shield, which results in an reduction of the spread in the cold spot temperature. See col. 1, lines 51-59. The outer tube of the lamp shown in Fig. 1 to illustrate the invention happens to have a tubular shape. However, there is no teaching or suggestion that the particular shape of the outer bulb has any particular advantage for the invention or otherwise. Moreover, Verschueren does not teach or suggest the application of any coatings of any type to the surface of the outer bulb.

Thornton discloses a high-pressure mercury-vapor discharge lamp having an outer bulb of the conventional ovoid

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shape. A blend of red, green and blue-emitting phosphors is coated on the inside of the outer bulb to absorb UV radiation from the inner arc tube. The absorbed UV radiation excites visible emissions from the phosphors. The relative proportions of the three phosphors determine the color temperature of the lamp. See col. 2, lines 3-27.

According to one embodiment, Thornton employs a light-scattering layer (42) in combination with the phosphor layer (34) to scatter UV radiation which escapes absorption by the phosphor particles, back to the phosphor layer (34) to energize the phosphor particles. See col. 4, lines 18-25.

Since Verschueren's lamp lacks any such phosphor layer, there is no teaching presented by Thornton to the skilled artisan which would suggest the addition of a light-scattering layer to Verschueren's lamp.

Accordingly, the claims are not obvious in view of the cited combination of references, and it is urged that the rejection is in error and should be reversed.

Claim 3 calls for the light-scattering layer to be an electrostatic coating. As explained in the SUMMARY OF THE INVENTION, an electrostatic coating is comparatively simple and can be produced using industrial-scale batch production processes.

Since Thornton does not teach or suggest any process

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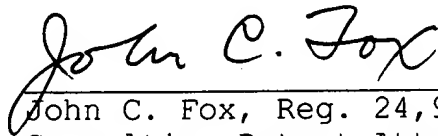
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for forming his light-scattering layer (42), claim 3 standing alone is patentable over the cited combination of references.

CONCLUSION

It has been shown that the claimed invention distinguishes patentably over the combined teachings of the prior art references applied, i.e., Verschueren and Thornton. Accordingly, Appellant respectfully requests that the Board reverse the Examiner's final rejection and direct that the Application proceed to Issue.

Respectfully submitted,



John C. Fox, Reg. 24,975  
Consulting Patent Attorney  
203-329-6584

APPENDIX A

CLAIMS ON APPEAL

1. A high-pressure discharge lamp comprising a discharge vessel which is enveloped with clearance by an outer bulb provided with a lamp cap, which outer bulb is translucent, is substantially tubular in shape, and is provided with a light-scattering layer.

3. A lamp as claimed in claim 1, characterized in that the light-scattering layer forms an electrostatic coating.